



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,868	10/07/2003	Tadahiro Igawa	086142-0580	3859

22428 7590 08/19/2005

FOLEY AND LARDNER  
SUITE 500  
3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER

BROWN, DREW J

ART UNIT	PAPER NUMBER
----------	--------------

3616

DATE MAILED: 08/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/679,868

Applicant(s)

IGAWA ET.AL.

Examiner

Drew J. Brown

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/7/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The abstract of the disclosure is objected to because “reliably opened the pressure” should be “reliably opened when the pressure.” Correction is required. See MPEP § 608.01(b).
2. The disclosure is objected to because of the following informalities: On line 5 of paragraph 29, “a vent holes” should be “a vent hole.” One line 3 of paragraph 62, “does not flows” should be “does not flow.”

Appropriate correction is required.

### ***Claim Objections***

3. Claim 10 is objected to because of the following informalities: “Wherein retainer” should be “wherein the retainer.” Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et al. (U.S. Pat. No. 6,131,942) in view of Hill (U.S. Pat. No. 6,086,092). Fujii et al. discloses an airbag, wherein the outer bag 1 includes a vent hole (10a & 10b) with a mechanism for maintaining the vent hole closed until the pressure of the gas in the outer bag reaches a predetermined level (column 4, lines 19-32). The vent hole is also positioned so that gas escapes from the vent hole out of the outer bag and through a retainer 11 for holding the gas generator.

Art Unit: 3616

A cover 17 is connected to the retainer for covering the airbag in a folded condition, wherein the cover is pushed open, or broken, by the inflation of the airbag (column 4, lines 5-9). The mechanism for maintaining the vent hole closed includes a lid (column 4, lines 27-29) mounted via screws 9 to the retainer and the outer bag, wherein the lid includes a frangible portion that breaks when the pressure in the outer bag reaches a predetermined level to allow gas to escape out of the outer bag (column 4, lines 29-32). This lid is also a sheet (column 4, lines 26-27) that covers a plurality of holes in the retainer (10b in Fig. 1), and it breaks when the pressure in the outer bag reaches a predetermined level. Fujii et al. does not disclose that that the airbag has an inner and an outer bag, and that a gas generator is configured to supply gas to the inner bag, wherein the inner bag includes an opening to allow gas to exit the inner bag to inflate the outer bag. Hill, however, does disclose that the airbag has an inner and outer bag, where the inner bag is inflated first and the gas exits through an opening to inflate the outer bag. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Fujii et al. with the teachings of Hill to include an inner bag that is mounted inside of the holes 10a and 10b to the retainer 11 in order to inflate before the outer bag so the outer bag is not inflated until the inner bag reaches a predetermined pressure, which protects the occupant from being struck by the outer airbag at too high of a pressure.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et al. in view of Hill, and further in view of Cundill et al. (U.S. Pat. No. 5,704,639). Fujii et al., as modified by Hill, discloses the claimed airbag as discussed above but does not disclose that the closing mechanism includes a gasket between the lid and the retainer. Cundill et al, however, does disclose a gasket, or a sealing member 24, which overlies a vent opening to allow inflation gas to

Art Unit: 3616

vent from the airbag only after a predetermined inflation pressure is reached. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the invention of Fujii et al. as modified by Hill with the teachings of Cundill et al. to have a gasket or sealing member overlies the vent opening between the lid and the retainer in order to maintain the desired pressure in the airbag by preventing gas from leaking during inflation.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujii et al. in view of Hill, and further in view of Buchanan (U.S. Pat. No. 6,603,526). Fujii et al., as modified by Hill, discloses the claimed airbag as discussed above but does not disclose that the sheet is connected to the retainer by an adhesive. Cundill et al, however, does disclose that an adhesive can be used to attach a vent cover 20 to a vent hole (column 3, lines 50-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use an adhesive to attach the vent cover to the vent hole in order to reduce the time needed to attach the cover to the hole; thus, the cost of manufacturing the airbag is also cheaper than one using stitching or welding.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nishijima et al. (U.S. Pat. No. 6,471,239 B1), Nishijima et al. (U.S. Pat. No. 6,224,101 B1), Fischer et al. (U.S. Pub. No. 2004/0232677 A1), Bunce et al. (U.S. Pat. No. 6,290,257 B1), Staub et al. (U.S. Pat. No. 6,059,312), and Amamori (U.S. Pat. No. 6,692,021 B2) disclose similar airbags with a vent mechanism that opens when a predetermined pressure in the airbag is attained.

Art Unit: 3616


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Drew J. Brown whose telephone number is 571-272-1362. The examiner can normally be reached on Monday-Thursday from 7 a.m. to 4 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Drew J Brown  
Examiner  
Art Unit 3616

DJB



**DAVID R. DUNN**  
**PRIMARY EXAMINER**